

# 6GC5

## Power Pentode

### NEONOVAL TYPE

#### GENERAL DATA

##### Electrical:

##### Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC) . . . . .  $6.3 \pm 0.6$  volts

Current at heater volts = 6.3 . . . . . 1.200 amp

##### Peak heater-cathode voltage:

Heater negative with respect to cathode . . . . . 200 max. volts

Heater positive with respect to cathode . . . . . 200<sup>a</sup> max. volts

##### Direct Interelectrode Capacitances (Approx.):<sup>b</sup>

Grid No.1 to plate . . . . . 0.9  $\mu\text{f}$

Grid No.1 to cathode & grid No.3, grid No.2, and heater . . . . . 18.0  $\mu\text{f}$

Plate to cathode & grid No.3, grid No.2 and heater . . . . . 7.0  $\mu\text{f}$

##### Mechanical:

Operating Position . . . . . Any

Type of Cathode . . . . . Coated Unipotential

Maximum Overall Length . . . . . 3.230"

Maximum Seated Length . . . . . 2.920"

Length, Base Seat to Bulb Top (Excluding tip) . . 2.370" to 2.610"

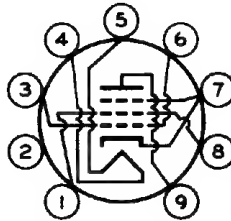
Diameter . . . . . 1.062" to 1.188"

Bulb . . . . . T9

Base . . . . . Large-Button Neonoval 9-Pin (JEDEC No.E9-68)

Basing Designation for BOTTOM VIEW . . . . . 9EU

Pin 1-Grid No.2  
Pin 2-No Internal  
Connection  
Pin 3-Grid No.1  
Pin 4-Heater  
Pin 5-Heater



Pin 6-Grid No.1  
Pin 7-Cathode,  
Grid No.3  
Pin 8-Grid No.2  
Pin 9-Plate

### AF POWER AMPLIFIER — Class A<sub>1</sub>

##### Maximum Ratings, *Design-Maximum Values*:

PLATE VOLTAGE . . . . . 220 max. volts

GRID-No.2 (SCREEN-GRID) VOLTAGE . . . . . 140 max. volts

GRID-No.2 INPUT . . . . . 1.4 max. watts

PLATE DISSIPATION . . . . . 12 max. watts



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DATA 1  
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## Typical Operation and Characteristics:

	<i>Fixed Bias</i>	<i>Cathode Bias</i>	
Plate Supply Voltage. . . . .	110	200	volts
Grid-No.2 Supply Voltage. . . . .	110	125	volts
Grid-No.1 (Control-Grid) Voltage. .	-7.5	-	volts
Cathode Resistor. . . . .	-	180	ohms
Peak AF Grid-No.1 Voltage. . . . .	7.5	8.5	volts
Zero-Signal Plate Current. . . . .	49	46	ma
Max.-Signal Plate Current. . . . .	50	47	ma
Zero-Signal Grid-No.2 Current. . .	4	2.2	ma
Max.-Signal Grid-No.2 Current. . .	10	8.5	ma
Plate Resistance (Approx.). . . . .	13000	28000	ohms
Transconductance. . . . .	8000	8000	$\mu$ hos
Load Resistance. . . . .	2000	4000	ohms
Total Harmonic Distortion. . . . .	10	10	%
Max.-Signal Power Output. . . . .	2.1	3.8	watts

## Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

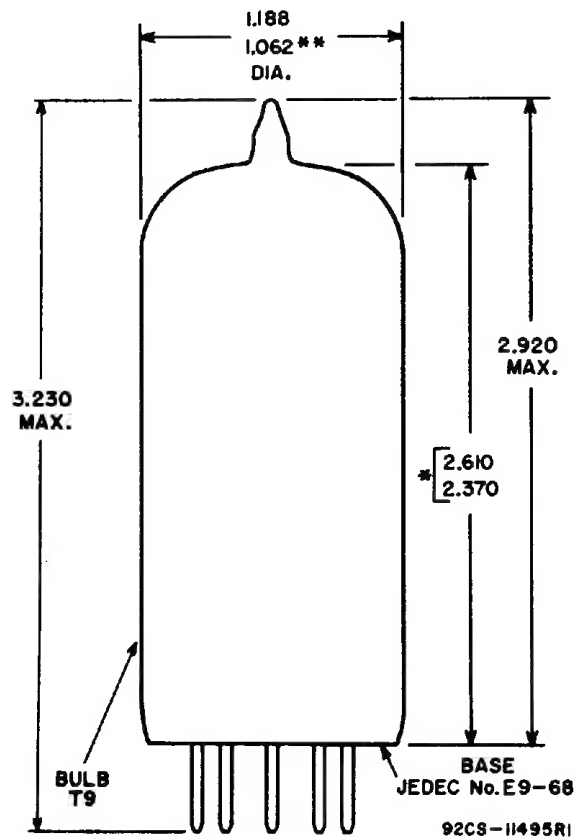
For fixed-bias operation. . . . .	0.1 max.	megohm
For cathode-bias operation. . . . .	0.5 max.	megohm

<sup>a</sup> The dc component must not exceed 100 volts.

<sup>b</sup> Without external shield.



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ALL DIMENSIONS IN INCHES

\*\* APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.

\* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600" INSIDE DIAMETER.

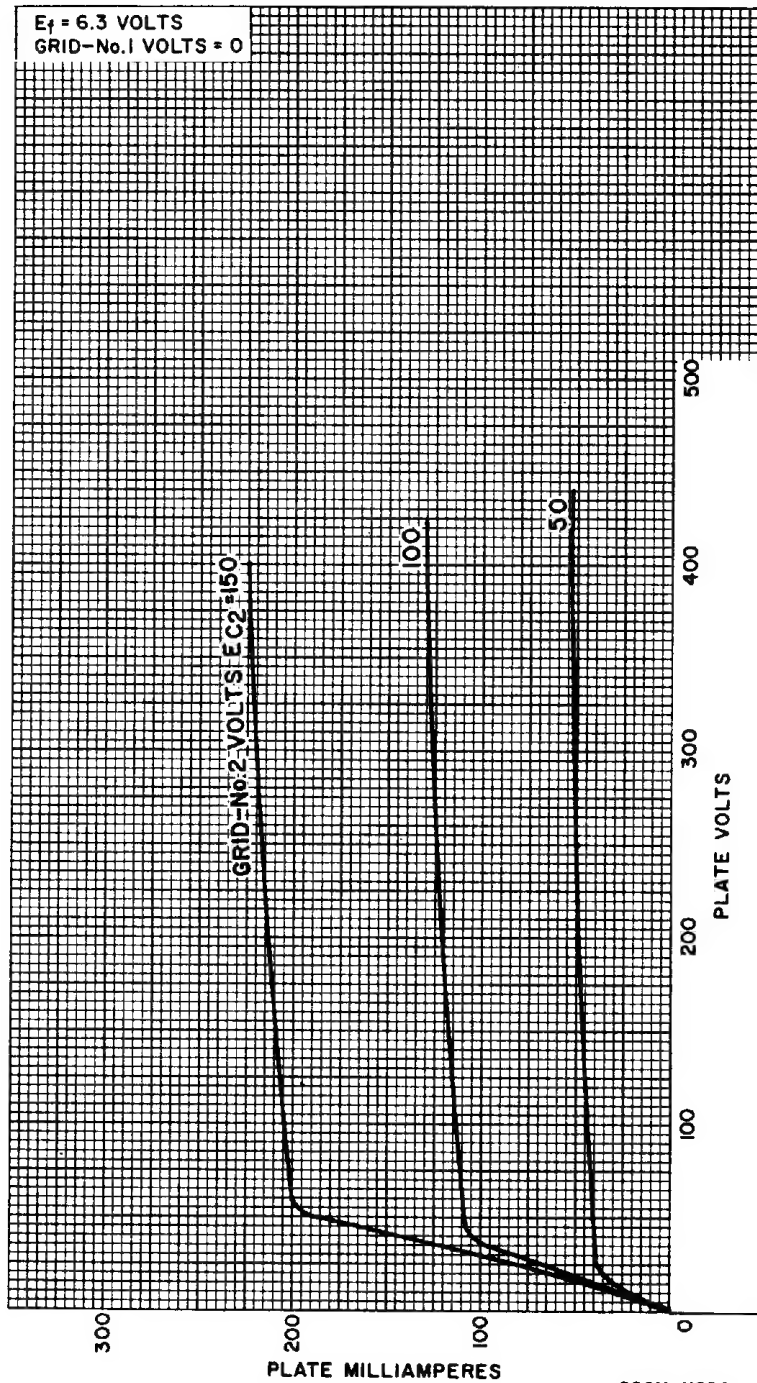


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## AVERAGE PLATE CHARACTERISTICS



92CM-11824

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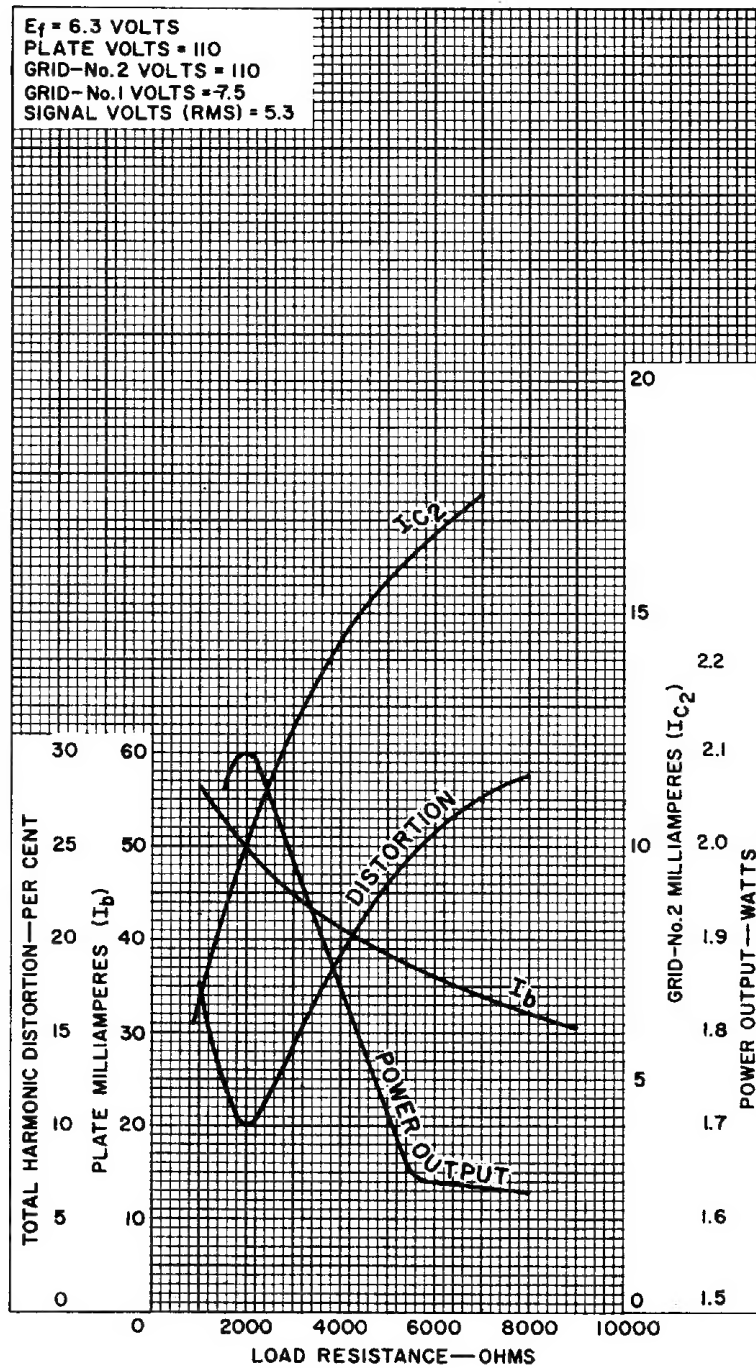
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## OPERATION CHARACTERISTICS



92CM-11828

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